UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,159	08/31/2000	Te-Kai Liu	YOR9-2000-0385US1	2619

			EXAMINER
30743	7590	10/10/2006	FRENEL, VANEL

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ART UNIT	PAPER NUMBER
3626	

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 July 0306</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant

1.   This communication is in response to the Pre-Appeal Brief Request for Review

filed on 7/3/06. Claims 1-20 are pending.

2.   The Pre-Appeal Brief Request for Review has been persuasive, therefore the

previous Office Action has been withdrawn and a new Office Action is hereby

presented.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Haynes et al 92005/0261986) in view of Obradovich et al (2002/0013815).

(A)   As per claim 1, Haynes discloses a car rental system comprising:

a fleet of cars, each of which is operable only when a valid digital key

is presented to the car (See Haynes, Page 1, Paragraphs 0016-0017); and

a management system for handling reservation and car return, said management

system (See Haynes, Page 2, Paragraph 0020),

a key generation system for generating digital keys for renters of the car rental

system (See Haynes, Page 6, Paragraphs 0076-0079); a key return system for

processing digital keys returned by renters (See Haynes, Page 6, Paragraph 0079).

Sher does not explicitly disclose each of said fleet of cars being capable of

invalidating a digital key.

However, this feature is known in the art, as evidenced by Obradovich. In

particular, Obradovich suggests that each of said fleet of cars being capable of

invalidating a digital key (See Obradovich, Page 10, Paragraph 0106).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to have included the features Obradovich within the system of Haynes with the

motivation of electronic information cards, referred to as "E-cards', may be used to

organize data in the mobile device and to exchange selected data between the server

and the mobile device (See Obradovich, Page 1, Paragraph 0011).

(B)   As per claim 2, Haynes discloses the system further comprising a parking lot

guarded by a security gate, said fleet of cars being parked within confines of said

parking lot when not rented by a renter of the car rental system, said security gate only

opening when a valid digital pass is presented by a renter of the car rental system (See

Haynes, Page 1, Paragraph 0009-0010).

(C)   As per claim 3, Haynes discloses the system wherein the management system is

accessed by a prospective renter over a network and the prospective renter is given a

digital key to operate a particular car and a digital pass to open the gate of the parking lot where said particular car is parked, after said prospective renter completes a reservation for said particular car, said digital key and digital pass being effective starting from the time specified by said reservation (See Haynes, Page 2, Paragraphs 0017-0019).

(D)   As per claim 4, Haynes discloses the system wherein the prospective renter accesses the management system at a kiosk located in the parking lot where the particular car is parked (See Haynes, Page 2, Paragraph 0023).

(E)   As per claim 5, Haynes discloses the system wherein the prospective renter accesses the management system over the Internet (See Haynes, Page 2, Paragraph 0020).

(F)   As per claim 6, Haynes discloses the system wherein the key generation system stores a digital key on a storage device provided by a prospective renter (See Haynes, Page 4, Paragraphs 0054- 0057).

(G)   As per claim 7, Obradovich discloses the system wherein the storage device is a smart card (See Obradovich, Page 1, Paragraph 0011).

The motivation for combining the respective teachings of Haynes and Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(H)   As per claim 8, Obradovich discloses the system wherein the digital key comprises

car and user identification (ID) signed by the management system to authenticate the

digital key (See Obradovich, Page 8, Paragraphs-0095 0094; Page 10, Paragraphs

0108-0111).

The motivation for combining the respective teachings of Haynes and

Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(I)   As per claim 9, Obradovich discloses the system wherein a renter of a car

invalidates a valid digital key upon returning a car to the car rental system and presents

an invalidated digital key to the key return system to complete a car return (See

Obradovich, Page 10, Paragraph 0106).

The motivation for combining the respective teachings of Haynes and

Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(J)   As per claim 10, Obradovich discloses the system wherein the invalidation of a

valid digital key includes storing car status information relevant to computing by the key

return system a receipt for the renter (See Obradovich, Page 10, Paragraphs 0108-

0112).

The motivation for combining the respective teachings of Haynes and

Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(K)   As per claim 11, Haynes discloses a computer implemented method for operating

a car rental system comprising the steps of

accessing a reservation server by a prospective car renter to reserve a car (See

Haynes, Page 1, Paragraphs 0002-0004);

authenticating the prospective car renter by the reservation server, upon the

reservation server successfully authenticating the user, prompting the prospective car

renter for the date, time, and location for pickup and return, and the type of car

(SeeHaynes, Page 1, Paragraphs 0002-0007);

checking by the reservation server an availability of a requested car and, if a car

is available, creating by the reservation server a digital key by car and user information

with a digital signature of the reservation server(See Haynes, Page 6, Paragraphs

0075-0078).

Haynes does not explicitly disclose that the method having downloading the

digital key to a portable storage device being used to gain access to a rental car without

communication between the rental car and the reservation server.

However, this feature is known in the art, as evidenced by Obradovich. In

particular, Obradovich suggests that the method having downloading the digital key to a

portable storage device being used to gain access to a rental car without

communication between the rental car and the reservation server (See Obradovich,

Page 10, Paragraph 0106).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to have included the features Obradovich within the system of Haynes with the

motivation of electronic information cards, referred to as "E-cards', may be used to

organize data in the mobile device and to exchange selected data between the server

and the mobile device (See Obradovich, Page 1, Paragraph 0011).

(L)   As per claim 12, Obradovich discloses the method wherein the step of accessing

the reservation server is performed via a network (See Obradovich, Page 12, Paragraph

0118).

      The motivation for combining the respective teachings of Haynes and

Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(M)   As per claim 13, Obradovich discloses the method wherein the network is the

Internet (See Obradovich, Page 12, Paragraph 0118).

.   The motivation for combining the respective teachings of Haynes and

Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(N)   As per claim 14, Obradovich discloses the method wherein the step of

authenticating a prospective car renter includes the steps of

      prompting the prospective car renter to enter a personal identification

      number (PIN) (See Obradovich, Page 10, Paragraph 0104); and

      comparing the entered PIN with a valid PIN for the prospective car renter (See

Obradovich, Page 10, Paragarph 0104; Page 11, Paragraph 0114).

The motivation for combining the respective teachings of Haynes and Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(O)   As per claim 15, Obradovich discloses the method wherein the step of creating a digital key comprises the steps of

computing a hash of the car renter's valid PIN (See Obradovich, Page 10, Paragraph 0108-0110);

combining car and renter identification with the hashed PIN (See Obradovich, Page 8, Paragraphs 0089-0095) ; and

digitally signing the combined information by said reservation server (See Obradovich, Page 10, Paragraphs 0106-0111).

The motivation for combining the respective teachings of Haynes and Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(P)   As per claim 16, Obradovich discloses the method further comprising the steps of inserting the portable storage device by a car renter into a slot for receiving the portable storage device in a rented car (See Obradovich, Page 1, Paragraph 0011);

upon detecting the portable storage device inserted into the slot,

obtaining by an access controller installed in the rented car the digital key

stored on the portable storage device and checking by the access controller

whether the digital key is valid and verifying the signature on the digital key (See

Obradovich, Page 9, Paragraph 0097-0098)

if the digital key is valid and the signature is verified, the access

controller then prompting the car renter to enter his or her identification and

checking for correctness of the car renter's identification (See Obradovich, Page

10, Paragraphs 0103-0104); and if the entered identification for the car renter matches a

correct identification on the portable storage device, the access controller activating

instruments of the car which the car renter is authorized to have access to (See

Obradovich, Page 10, Paragraphs 0103-0106).

The motivation for combining the respective teachings of Haynes and

Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(Q)   As per claim 17, Obradovich discloses the method further comprising the steps of

upon receiving a car renter's request to return a car, prompting the car renter to

insert his or her portable storage device into the slot for the portable storage device

(See Obradovich, Page 1, Paragraph 0011; Page 2, Paragraph 0039); obtaining by the

access controller car status information and car identification (See Obradovich, Page

10, Paragraph 0104); creating by the access controller a return packet by combining car

status information and the current digital key (See Obradovich, Page 0108-0110);

signing the return packet by the access controller, appending the car identification to the

signed return packet, and saving the signed return packet into the portable storage

device (See Obradovich, Page 12, Paragraph 0118); and invalidating by the access

controller a current digital key (See Obradovich, Page 10, Paragraphs 0106-0108; Page

11, Paragraphs 0113-0116).

The motivation for combining the respective teachings of Haynes and Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(R)   As per claim 18, Obradovich discloses the method further comprising the steps of

upon receiving a car renter's request to return a car, retrieving the

return packet from the portable storage device (See Obradovich, Page 8, Paragraph 0094);

verifying a signature on the return packet (See Obradovich, Page 9, Paragraph 0095); and

updating the car status and printing a receipt for the car renter (See Obradovich, Page 11, Paragraph0112).

(S)   As per claim19, Obradovich discloses the method wherein the portable storage device is a <u>smart</u> card (See Obradovich, Page 11, Paragraph 0112).

The motivation for combining the respective teachings of Haynes and Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

(T)   As per claim 20, Obradovich discloses the system wherein each of said fleet of cars has a storage device for storing a record of the digital key (See Obradovich, Page 9, Paragraph 0097).

The motivation for combining the respective teachings of Haynes and Obradovich are as discussed in the rejection of claim 1, and incorporated herein.

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 571-272-6769. The examiner can normally be reached on Monday-Thursday from 6:30 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

V.F

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September 30, 2006

JOSEPH THOMAS
SUPERVISORY PATENT EXAMINER